CLAIMS

What is claimed is:

Claim 1. A method for optimizing distribution of information, the method comprising:

generating update information based upon at least one universal dictionary;

communicating the update information to a remote device, the update package enabling use by the remote device of the at least one universal dictionary; and

communicating a reduced amount of data to the remote device based upon the at least one universal dictionary.

Claim 2. The method according to claim 1, wherein the at least one universal dictionary comprises a universal dictionary employed by a sender and another universal dictionary employed by the remote device.

Claim 3. The method according to claim 2, wherein the universal dictionary employed by the sender and the universal dictionary employed by the remote device comprise substantially identical information.

Claim 4. The method according to claim 1, wherein the at least one universal dictionary comprises a universal dictionary shared by the sender and the remote device.

Claim 5. The method according to claim 1, further comprising regenerating original data from an update package received from a sender by using the universal dictionary.

Claim 6. The method according to claim 1, further comprising:

comparing information contained in at least a pair of binary images;

deriving difference information from the compared information;

creating an update package comprising the derived difference information;

sending the update package to a universal dictionary accessible by the remote device; and

updating the universal dictionary accessible by the remote device with the update package.

Claim 7. The method according to claim 6, wherein the derived difference information at least comprises a set of instructions and associated data.

Claim 8. The method according to claim 7, wherein the set of instructions comprises at least one program instruction selected from: copy; duplicate; set; reference location call; and delete.

Claim 9. The method according to claim 1, further comprising:

generating a plurality of update packages;

analyzing the update packages to determine differences in at least two universal dictionaries;

communicating difference information to the at least two universal dictionaries; and

synchronizing the at least two universal dictionaries.

Claim 10. The method according to claim 1, further comprising:

comparing random data associated with a plurality of information packages to be transmitted;

compressing the random data based upon contents of the plurality of information packages;

sharing the compressed random data with a plurality of sender/receiver pairs; and

synchronizing the at least one universal dictionary associated with a sender/receiver pair based upon the compressed random data.

Claim 11. The method according to claim 1, wherein the update information comprises an update package.

Claim 12. A method for optimizing distribution of information between an electronic device and a server, the method comprising:

accessing at least one universal dictionary by the electronic device and the server;

generating at least one optimized photo information package, using a reference frame of photos, from a new photo acquired by the electronic device;

communicating the at least one optimized photo information package from the electronic device to the server;

receiving the at least one optimized photo information package at the server;

regenerating the new photo from the at least one optimized photo information package; and

storing the regenerated new photo in a storage.

Claim 13. The method according to claim 12, wherein generating at least one optimized photo information package further comprises:

generating at least one update package in the electronic device, the at least one update package comprising optimized photo information;

communicating the at least one update package from the electronic device to the server;

processing the at least one update package;

regenerating a copy of the new photo based upon information in the at least one update package.

Claim 14. The method according to claim 12, wherein generating at least one optimized photo information package further comprises:

generating a plurality of update packages, each update package containing photo information comprising an initial quantity of memory;

transferring at least one of the plurality of update packages to at least one processing device;

processing the at least one update package by compressing the photo information contained in the at least one update package such that the photo information occupies a reduced quantity of memory;

transferring the at least one update package to the photo server;

regenerating at least one photo using the compressed photo information in the at least one update package; and

storing the at least one regenerated photo, whereby the at least one regenerated photo occupies less memory than the initial quantity of memory.

Claim 15. A system for optimizing distribution of information, the system comprising:

a first electronic device capable of at least generating and sending digital information;

a second electronic device capable of at least receiving, regenerating and storing digital information; and

the first and second electronic devices employing at least one universal dictionary to at least store, retrieve and manage digital information.

Claim 16. The system according to claim 15, wherein the first electronic device is a digital camera.

Claim 17. The system according to claim 16, wherein the digital camera at least comprises:

image acquisition circuitry for acquiring digital photographic information;

communication agent for communicating with external devices;

generator for generating an update package to be communicated to the receiver;

reference frame of photos; and

previously acquired digital photographic information.

Claim 18. The system according to claim 17, wherein the generator processes the previously acquired digital photographic information by comparing the previously acquired digital photographic information to the reference frame of photos and generating an update package to be communicated to the receiver comprising information from the reference frame and the previously acquired digital photographic information.

Claim 19. The system according to claim 18, wherein the reference frame of photos at least comprises additional previously acquired digital photographic information and digital photographic information corresponding to a particular digital camera.

Claim 20. The system according to claim 15, wherein the second electronic device comprises a photo server.

Claim 21. The system according to claim 20, wherein the photo server at least comprises:

communication agent for at least receiving digital photographic information from the first electronic device;

an update agent for at least generating a local copy of previously acquired digital photographic information received from the first electronic device;

a processor for processing digital photographic information; and

memory for storing digital photographic information.

Claim 22. The system according to claim 21, wherein the photo server further comprises a plurality of reference frames of photos, each reference frame corresponding to at least one particular first electronic device.

Claim 23. The system according to claim 15, wherein the at least one universal dictionary further comprises a first universal dictionary employed by the first electronic device and a second universal dictionary employed by the second electronic device.

Claim 24. The system according to claim 23, wherein first universal dictionary and the second universal dictionary contain substantially identical information.

Claim 25. The system according to claim 15, wherein the at least one universal dictionary is shared by the first and second electronic devices.

Claim 26. The system according to claim 15, further comprising a flash image server to provide optimized digital information to a flash memory when an electronic device may be initially flashed with a memory image.

Claim 27. The system according to claim 26, further comprising a flash manager to initialize an electronic device a first time the electronic device is flashed.

Claim 28. The system according to claim 27, further comprising a flash update driver employed by the flash manager to embed a new image onto the flash memory which may be employed by a processing circuitry operating the electronic device.